

RYVKIN, S.M.; KONOPLEVA, R.F.; MASLOVA, L.V.; MATVEYEV, O.A.; STROKAN, N.B.;  
TARKHIN, D.V.; KHOZOV, G.V.

Germanium photodiodes with small inertia. Fiz. tver. tela 2 no.9:2199-  
2201 S '60. (MIRA 13:10)

1. Leningradskiy fiziko-tekhnicheskiy institut AN SSSR.  
(Germanium diodes)

37808

24,7800

S/120/62/000/002/039/047  
E140/E163.

AUTHORS: Berkovskiy, F.M., Strokan, N.B., and Khozov, G.V.

TITLE: Study of the possibility of measuring semiconductor relaxation times of the order of  $10^{-8}$  sec by the phase method

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 165-168

TEXT: A Kerr-cell modulator with sinusoidal 1 Mcs control signal was used to determine the lag of a fast photodiode on the basis of phase shift measurements. Two methods of obtaining the reference were examined: a photomultiplier detects the same light signal; the voltage applied to the Kerr cell is itself taken as the reference. It is considered that the delay in the photomultiplier itself is not negligible at the values used in the present measurements, whereas the phase shifts in the modulator are negligible. A constant difference was observed between the results obtained with the photomultiplier and those based on the Kerr-cell control voltage of the order of  $10^{-8}$  sec.

Card 1/2

Study of the possibility of ...

S/120/62/000/002/039/047  
E140/E163

The precision of the latter method is slightly higher and  
superior for measurements of time intervals shorter than  
 $10^{-8}$  sec.

There are 3 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut AN SSSR  
(Physicotechnical Institute, AS USSR)

SUBMITTED: July 5, 1961

Card 2/2

S/120/63/000/001/030/072  
E039/E320

AUTHORS: Strakan, N.B. and Khozov, G.V.

TITLE: Use of a diffraction-modulator for measuring small relaxation times in semiconductors by the phase method

PERIODICAL: Pribory i tekhnika eksperimenta, no. 1, 1963, 122-125

TEXT: Data are presented on the transmitted light-modulation system. The cell used is as described in an earlier paper (Popov et al - Optiko-mekhan. prom-st', 1959, no. 1, 30). It is filled with orthoxylene and a barium-titanate plate is used as a vibrator with a natural frequency of 5.25 Mc/s. The advantages of the diffraction-modulation system compared with the Kerr cell are: 1) elimination of the foil and lower controlling voltage than required for a Kerr cell; 2) for a corresponding selection of liquids the diffraction-modulation system can work in the 3 to 4  $\mu$  region of the spectrum; 3) low intensity of illumination required; 4) because of its low control voltage the diffraction-modulation system makes it easier to work at high frequencies. The apparatus is used for making measurements on the silicon surface-

Card 1/2

Use of a . . . .

S/120/63/000/001/030/072  
E039/E072

- barrier photodiode with a time constant of  $10^{-8}$  to  $10^{-9}$  sec.  
There are 3 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut AN SSSR  
(Physicotechnical Institute of the AS USSR)

SUBMITTED: April 4, 1962

Card 2/2

MASLOVA, L. V.; MATVEYEV, O. A.; RYVKIN, S. M.; STROKAN, N. B.;  
TARKHIN, D. V.; KHOZOV, V. G.

Possibilities for using silicon counters in nuclear research.  
Izv. AN SSSR. Ser. fiz. 16 no.12:1498-1505 D '62.  
(MIRA 16:1)

(Nuclear counters—Design and construction)

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320001-4

RUMYNOVA, T.P.; KHOZOVA, L.M.

Dyeing of elastic hosiery. Nauch.-issn. trudy VINITP no. 58  
85-90 16/  
(NIRA 19,1)

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320001-4"

1. KHOZOWSKIY, I L., Engs.; SHUVALOV, N. A.
2. USSR (600)
4. Steam Boilers - Air Preheating
7. Initial results of operating air preheaters of small dimensions designed by the All-Union Institute of Heat Engineering. Elek. sta., 23, No. 1, 1952
  
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

SLAVYANSKIY, Viktor Timofeyevich; YEVSTROP'YEVA, K.S., doktor khimicheskikh nauk, professor, redaktor; FREYBERG, S.I., zasluzhennyy deyatel' nauki i tekhniki, professor, retsenzent: KHOZYAINOV, M.I., inzhener, redaktor; SUVOROVA, I.A., izdatel'skiy redaktor; ROZHIN, V.P., tekhnicheskiy redaktor.

[Gases in glass] Gazy v stekle. Pod.red. K.S. Evstrop'eva. Moskva,  
Gos.izd-vo obor.promyshl., 1957. 141 p. (MLRA 10:4)  
(Glass)

FEDOROVA, Ye.O.; KHOZYAINOV, M.I., inzh., red.; MOROZOVA, P.B., izdatel'skiy  
red.; BOZHIN, V.P., tekhn. red.

[Indicators of light scattered by large transparent particles of  
spherical and random forms] Izuchenie indikatorov rasseyaniia sveta  
krupnymi prostrachnymi chashitsami sfericeskoi i proisvol'noi  
formy. Moskva, gos. izd-vo obor. promyshl. 1957. 68 p. (Leningrad.  
Gosudarstvennyi Opticheskii Institut. Trudy, no.151). (MIRA 11:6)

(Light—Scattering)

YASTREBOVA, L.S.; KHOZYAINOV, M.I., inzh., red.; MOROZOVA, P.B., izdatel'skiy  
red.; ROZHIN, V.P., tekhn.red.

[Protection of optical silica glass from chemical damage] Zashchita  
silikatnykh opticheskikh stekol ot khimicheskogo razrushenija.  
Moskva, Gos. izd-vo obor. promyshl., 1958. 108 p. (MIRA 11:5)  
(Glass, Optical)

KHOZYAINOV, V. T.

KHOZYAINOV, V. T. - "Meson Formation During Peripheral Collisions of Nucleons."  
Sub 10 Jan 53, Inst of Physical Problems imeni S. I. Vavilov, Acad Sci  
USSR. (Dissertation for the Degree of Candidate in Physicomathematical  
Sciences).

SO: Vechernaya Moskva January-December 1952

KORSUNSKIY, M.I.; KHOMYAINOV, V.T., redaktor; TUMARKINA, N.A., tekhnicheskiy redaktor.

[Isomerism of atomic nuclei] Izomeriya atomnykh iader. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1954. 327 p. (MLRA 7:8)  
(Nuclear physics)

USSR/Nuclear Physics - Particle collision  
Card 1/1 : Pub. 146-3/20

FD-1480

Author : Khozyainov, V. T.

Title : Theory of collisions of particles with a specified angular momentum

Periodical : Zhur. eksp. i teor. fiz., 27, 275-282, Sep 1954

Abstract : The relativistic wave function of a two fermion system having a certain angular momentum in common is obtained by means of spherical vector functions and is represented as superposition of wave functions assumed to be plane, but having spin. The processed analysis contains a method of investigation of various processes at a specified angular momentum. Six references including 4 foreign.

Institution : Institute of Physical Problems, Acad Sci USSR

Submitted : November 6, 1953

RML

2297. Formation of ~~mesons~~ in periphery collisions  
of nucleons. V. T. KHOZYAINOV. Zh. Eksp. Teor.  
Fiz. 27, No. 4(10), 455-57 (1944) in Russian.

The cross-section is expressed as a function of  
relative angular momentum as well as of energy of  
the nucleons. It is assumed that perturbation theory  
is adequate for periphery (grazing) collisions, i.e. for  
collisions with impact parameter greater than a critical  
value, which is taken here to be the value at which the  
probability is of order unity. Collisions with smaller  
impact parameter are not discussed. O. E. BROWN

KHOZYAINOV, V.T.

FRESNEL, Augustin Jean; TSEITLIN, Z.A. [translator]; LANDSBERG, G.S., akademik, redaktor; KHOZYAINOV, V.T., redaktor; TUMARKINA, N.A., tekhnicheskij redaktor.

[Selected studies in optics. Translated from the French by Z.A.TSeitlin]  
Izbrannye trudy po optike. Pereved s frantsuzskogo Z.A.TSeitlina. Pod red.G.S.Landsberga. Moskva, Gos.izd-vo tekhnika-teoreticheskoi lit-ry, 1955. 602 p. (Optics) (MIRA 9:6)

KHOZYAINOV, V.T.

Stories of the universe and the atom. ("The universe and the atom"  
V. Mezentsev. Reviewed by V.T. Khoszainov). Nauka i zhizn' 22  
no.4:62-63 Ap '55.  
(Mezentsev, Vl. A.) (Cosmology)

RUDNER, Yuriy Borisovich; KHOZYAINOV, V.T., redaktor; GAVRILOV, S.S.,  
tekhnicheskiy redaktor

[Studies in 5 optics] Issledovaniia po 5-optike. Moskva, Gos.  
izd-vo tekhniko-teoret. lit-ry, 1956. 151 p. (MLRA 9:7)  
(Physics) (Field theory)

KHOZJAINOV, V.T.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1458  
AUTHOR CHOZJAINOV, V.T.  
TITLE Remarks concerning the Theory of the Scattering of Particles with  
an Assumed Total Moment of the Kinetic Quantity.  
PERIODICAL Žurn.eksp.i teor.fis, 31, fasc.1, 138-140 (1956)  
Issued: 9 / 1956 reviewed: 11 / 1956

Here the scattering of two fermions which are in interaction by a boson field, is investigated. However, in contrast to the usual treatment of the problem, the initial- and final states of the fermion pair is assumed as a state with a certain total moment of the kinetic quantity. The motion of the center of mass is best separated from the relative motion. The matrix element corresponding to the simplest irreducible diagram is written down. Here only such interaction processes are studied as do not lead to the emission or absorption of bosons. Also the case without exterior fields is investigated. The matrices which are of interest here are obtained best by transformation from the above mentioned matrix element; they are explicitly written down. In electrodynamics it is formally impossible to carry out integration in the expression for the matrix element. In the case of not too high initial energies the scattering amplitude depends exponentially on the mass of the bosons transmitting interaction, which makes scattering with the help of heavy particles little probable. For the energies  $j \mu/p \ll 1$  the scattering amplitude grows logarithmically.

The aforementioned transformation makes it possible to eliminate divergences within the framework of the perturbation theory without carrying out the computa-

KHOZAYINOV, V.T.

1-Copy

4735

REMARKS ON THE THEORY OF SCATTERING OF PARTICLES WITH A GIVEN TOTAL ANGULAR MOMENTUM.  
V. T. Khorzhanov (Academy of Sciences, USSR). Soviet  
Phys. JETP 4, 137-8 (1957) Feb.

The scattering of two fermions interacting by means of a boson field is considered. The initial and final states of pair of fermions are specified as states with a certain given total angular momentum. (B.J.H.)

and ~~pls~~  
wyc

-24(8) 24.5600

AUTHOR: Khozyainov, V.T.

66823  
SOV/155-58-5-24/37

TITLE: The Boundary Between the Normal and the Superfluid Phase of Fluid Helium in a Heat Convection

PERIODICAL: Nauchnyy doklad vysshey shkoly. Fiziko-matematicheskiye nauki, 1958, Nr 5, pp 139-146 (USSR)

ABSTRACT: In [Ref 1] V.P. Peshkov stated that in fluid helium which is in a temperature field with constant gradient, two different fluid phases can be observed simultaneously, whereby temperature and density make a jump on the boundary. In the present paper the author tries to comprehend theoretically the heat transfer between both phases ; for the jump of temperature he obtains a rough approximation ; he explains the visual stability of the phase boundary (in spite of turbulence). If the process is understood at the boundary as an analogue of the heterogeneous reaction, then it is  $q = a(\Delta T)^\alpha$ , where  $q$  is the heat flow along the fluid helium,  $\Delta T$  the jump of temperature. For  $\alpha$  the author calculates the value  $\alpha^{-1} = 1.9$  which coincides with the experiment [Ref 1].

Card 1/2

24(5)

AUTHOR:

Khozyainov, V. T.

SOV/20-122-6-13/49

TITLE:

On the Theory of the Multiple Production of Elementary  
Excitations (K teorii mnozhestvennogo obrazovaniya elementarnykh  
vozbuzhdeniy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6, pp 1003-1006  
(USSR)

ABSTRACT:

The state of a quantum liquid (superfluid helium) at temperatures that are different from absolute zero represents a totality of elementary excitations which form a gas of quasiparticles (phonons and "rotons") in first approximation. In this case absorption- and emission processes of the excitations (transition- and relaxation phenomena) are possible. The concrete properties of the interaction leading to the production of the excitation are unknown, though interaction must be considerable in the case of great energy densities. Therefore, the yield of a multiple process is best calculated by the statistical method developed by Fermi (Ref 1). First, a formula is given for the relative probability of the decay

Card 1/4

SOV/2o-122-6-13/49

## On the Theory of the Multiple Production of Elementary Excitations

$S_n(W)$  of a composed system with the total energy  $W$  in  $n$  equal quasiparticles. The law of the conservation of the angular momentum is neglected, which, however, is not a grave error in the approximation under investigation. Very large systems, the dimensions of which are much greater than the free length of path of an elementary excitation in the surrounding medium, must behave in a manner similar to that of heterophase inclusions. Next, the formula for  $S_n(W)$  is transformed with the help of integral representations. In the case of "rotons" with the energy spectrum  $\epsilon(p) = \Delta + (p - p_0)^2/2\mu$  the relative probability of the production of  $n$  excitations by the gradual application of the saddle point method is used for every integration. The expression obtained after rather lengthy calculations is explicitly written down.  $\epsilon(p)$  denotes the energy of a single elementary excitation, while the other quantities occurring in the above formulae have apparently already been defined by earlier papers. In a similar manner also those formulae are calculated which, in the same approximation, describe the probability of the formation of e.g. "rotons" and  $n$ -s phonons. By means of the probabilities found, it is then

Card 2/4

SOV/2o-122-6-13/49

On the Theory of the Multiple Production of Elementary Excitations

possible to calculate the average number of a certain type of elementary excitations formed in the decay of a certain system:

$$\bar{n} = \sum nS_n / \sum S_n.$$

Besides, it is possible in this way to calculate the quadratic deviation from the mean value. Determination of the maximum of the function  $S(x)$  is reduced to solving a transcendental equation, the form of which depends on the energy spectrum of the excitations produced. The special formulae for photons and rotons are explicitly written down. There are 2 figures and 2 references.

ASSOCIATION: Matematicheskiy institut im. V. A. Steklova Akademii nauk  
SSSR  
(Mathematics Institute imeni V. A. Steklov of the Academy  
of Sciences, USSR)

Card 3/4

10(2)

AUTHOR: Khozyainov, V. T.

SOV/2o-123-5-18/50

TITLE: Transfer of Heat Between the Normal and the Superconducting Phases of Liquid Helium (Perevoda tepla mezhdu normal'noy i sverkhtekuchey fazami zhidkogo gelyiya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 5, pp 835-837 (USSR)

ABSTRACT: V. P. Peshkov (Ref 1) detected a visible boundary between the superfluid and the normal modifications of helium if a steady flow of heat passes this boundary. Although the phase transition between these 2 modifications is a transition of the second kind (under usual conditions), in the present case discontinuities of the density and of the temperature on the boundary were observed and its dependence on the density of heat flow was measured. This paper deals with the heat transfer mentioned in the title and with the existence of a stable boundary between these 2 modifications notwithstanding the obvious presence of turbulences (turbulent heat conduction) in normal helium. The mechanisms of heat conduction are essentially different on both sides of the boundary

Card 1/4

SOV/20-123-5-18/50

## Transfer of Heat Between the Normal and the Superconducting Phases of Liquid Helium

(superfluid helium is also a superconductor of heat). From the phenomenological point of view, there is a continuous absorption of the superconducting part  $q_s$  and a continuous production of the normal part  $q_n$  of the density of helium II ( $q = q_n + q_s$ ,  $q_n v_n = -q_s v_s$ ). This causes a multiple production of excitation quanta ("rotons") which play the principal part at the investigated temperatures. Formally, the heat flow through the boundary can be represented by  $q = a(\Delta T)^\alpha$  where  $\Delta T = T - T_o$  is the measured temperature discontinuity.  $T > T_\lambda$  is the average temperature of the normal phase near the boundary. In the investigated case, the steady state of superfluid helium is determined by the maximum entropy  $S(T, v)$  of helium II.  $v$  denotes the "relative velocity"  $v = v_n - v_s$ . The steady temperature  $T_o$  is the lower the more intense the heat flow through the boundary between the phases. The mechanism of the multiple production of quasiparticles (rotons) can be explained as follows: Compound systems are

Card 2/4

SOV/2o-123-5-18/5o  
Transfer of Heat Between the Normal and the Superconducting Phases of  
Liquid Helium

Card 3/4

formed in the boundary region and these systems have a higher energy density than the surrounding media. These systems are then disintegrated and they pass over to one of the possible states which can be characterized by the number of the produced quasiparticles. The probability of this phenomenon and the average number of the produced rotons in one act of disintegration was found in one of the author's previous papers (Ref 3). These results are used in the present paper. The formation of the compound systems depends on the hydrodynamic properties of liquid helium and on the heat transfer in the normal phase. Turbulence decreases quickly in superfluid helium. A formula is derived for the drop dimensions. The problem was idealized in the following way: The properties of the liquid were assumed to be essentially different on both sides of the boundary and that cannot be quite true near the  $\lambda$ -point. The results of the calculations show, however, that the theory correctly takes account of the principal features of the mechanism. The author thanks V. P. Peshkov for some useful discussions of the problem.

SOV/2o-123-5-10/50  
Transfer of Heat Between the Normal and the Superconducting Phases of  
Liquid Helium

There are 1 figure and 5 Soviet references.

ASSOCIATION: Matematicheskiy institut im. V. A. Steklova Akademii nauk SSSR  
(Mathematical Institute imeni V. A. Steklov of the Academy  
of Sciences, USSR)

PRESENTED: July 18, 1958, by N. N. Bogolyubov, Academician

SUBMITTED: May 22, 1958

Card 4/4

KHOZYAINOV, V.T., kand.fiz.-mat.nauk

Wonderful current. Znan.sila 34 no.2:22-23 P '59. (MIRA 12:3)  
(Superconductivity)

FEDYANIN, V.K.[translator]; KHOZYAINOV, V.T. [translator];  
MEDVEDEV, B.V., red.; SHIRKOV, D.V., red.; LIVSHITS,  
B.L., red.

[What do physicists think about] Nad chem dumaiut fiziki.  
Pod red. B.V.Medvedeva i D.V.Shirkova. Moskva, Fizmatgiz.  
No.1. [Nuclear physics] Fizika atomnogo iadra. 1962. 99 p.  
Tranlsated from the English. (MIRA 17:6)

ACCESSION NR: AP4030632

S/0048/64/028/004/0620/0625

AUTHOR: Khozyainov, V.T.

TITLE: A theoretical model of  $\text{ABO}_3$  type ferroelectrics [Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May to 5 June 1963]

SOURCE: AN SSSR. Izv. Ser. fiz., v.28, no.4, 1964, 620-625

TOPIC TAGS: ferroelectricity, correlation interaction polarization,  $\text{ABO}_3$  type ferroelectrics

ABSTRACT: The possibility is discussed that polarization may arise in crystals of the type  $\text{ABO}_3$  as a result of correlation interactions between electrons in the un-filled shells of the A and B ions. The interactions between the valence electrons are treated by the generalized variation principle of Bogolyubov (N.N.Bogolyubov, V.V.Tomachev and D.V.Shirkov, Novy\*y metod v teorii sverkhprovodimosti, 1958; S.V. Tyablikov, Nauchny\*ye doklady\* vy\*shev shkoly\*, No.3, 1958). This involves introducing a set of quasiparticles for which the vacuum state is the ground state of the system. Bogolyubov's principle yields the transformed Hamiltonian and a set of equations to determine the canonical transformation from the "real" to the quasiparti-

Card 1/3

ACCESSION NR: AP4030632

cles. The transformed Hamiltonian contains the self-consistent field and pair correlation interactions. The self-consistent field is assumed to be known, and the terms containing the polarization are written in a rough approximation involving the average internal field of the crystal. The problem is simplified by the assumption that there are just two sets of overlapping states, having oppositely directed dipole moments, and that the pairing interaction is attractive in a certain energy region. The chemical potential and the ground state dipole moment are then calculated. The latter will be different from zero provided the pairing interactions among the two sets of states are not identical, and one can expect this to be the case because of the existence of preferred directions in the crystal. The theory makes it possible to understand the great differences between the ferroelectric behavior of crystals that can be expected to have very similar self-consistent fields. BaTiO<sub>3</sub> and BaZrO<sub>3</sub>, for example, should be generally very similar. However, the energies of the 6s levels of Ba and Ti are much closer (about 1 eV) than those of Ba and Zr (about 5 eV). The pair interactions are accordingly able to produce a spontaneous polarization in the one case and not in the other. Orig.art.has: 43 formulas.

Card 2/3

ACCESSION NR: AP4030632

ASSOCIATION: Matematicheskiy institut im.V.A.Steklova Akademii nauk SSSR (Mathematical Institute, Academy of Sciences, SSSR)

SUBMITTED: OO

DATE ACQ: 30Apr64

ENCL: OO

SUB CODE: *bP, bC*

NR REF Sov: 002

OTHER: 000

Card 3/3

KHOZYAINOVA, E. Ye.

KHOZYAINOVA, E. Ye. -- "A Study of Phonetics of the Native Language in the Fifth Class of the 'komi' School." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of Teaching Methods. Moscow, 1955. (Dissertation for the Degree of Candidate of Pedagogical Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

198

SHKABARA, Ye.A. [Shkabara, K.O.] (Kiyev); KHOZYAINOVA, S.P. (Kiyev)

Programming of an electronic computer on a problem of establishing  
diagnosis. Avtomatyka 7 no.3:51-56 '62. (MIRA 15:6)  
(Programming (Electronic computers))  
(Medical electronics)

VEPRITSKIY, A.S., kand. tekhn. nauk; KHOZYAYEV, I.A., inzh.

Effect of the height of the arrangement of milk pipes on the work  
of a milking apparatus. Trakt. i sel'khozmash. no.6:34-37 Je '65.

(MIRA 18:7)

1. Rostovskiy institut sel'skokhozyaystvennogo mashinostroyeniya.

## Authors' Certificates

**Elektrosvyaz'**, 1959, no. 2, p. 78 SOV/106-59-2-10/11

I.A. Khraban - "A Method for the Separation of a Narrow-bandwidth, Weak Signal from Strong, Wide-spectrum, Background Noise"; N.P. Khvorostenko - "Resonance Amplifier Type of Oscillator with Shock Excitation"; L.N. Deryugin and B.Ya. Myakishev - "Diffraction, Reflecting, Side-radiation Antenna with a Controlled Polar Diagram Over a Wide Sector"; P.S. Seleznev and G.B. Glebovich - "Construction of a Magnetostriction Transducer for Magnetostriiction Delay Lines"; L.G. Dorfman - "A Television Co-axial Separating, Bridge-type, Filter"; Ye.U. Badyr' - "Apparatus for Pulling a String along Pipes"; B.A. Barskiy and Ye.N. Kuzin - "A Differential Transformer or Choke for Measurement Bridges"; E.N. Ulanovskiy and Ye.V. Anurin - "Apparatus for Measurement of the Magnitude of the Reverse-current of Semiconductor Rectifier Elements"; Yu.A. Skripnik - "A Method for Determination of the Phase Angle Between Two Voltages and Apparatus for Realisation of this Method".

Card 2/2

KHRABAN, O.

Amplifiers, Vacuum Tube

Negative feed-back in low-frequency amplifiers Kinomekhanik no. 2, Feb. 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

KHRABRAN, O.

"Volume control with frequency compensation."

So, Radio, Vol. 3, p. 51, 1952

VOLKOV, V. : KINOMEKHANIK, O.

Vacuum Tubes

Work of electronic lamp. Kinomekhanik No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320001-4

KHODAEN, O.

Loud-Speakers

Compensatory regulator of loudness. Radio, 29, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320001-4"

KHRABAN, O.

Decibels. Kinomekhanik no.10:42-43 0 '53.

(MLRA 6:10)  
(Decibels)

PROVAZ, Josef; KHRABAN, O.G., kand. tekhn. nauk [translator];  
LINDE, D.P., kand.tekhn.nauk, red.; DROZDOVSKAYA, I.S., red.;  
REZOUKHOVA, A.G., tekhn. red.; IOVLEVA, N.A., tekhn. red.

[Temperature compensation of the instability of high-frequency circuits] Temperaturnaia kompensatsiia nestabilnosti vysokochastotnykh konturov. Pod red. D.P.Linde. Moskva, I  
Izd-vo inostr.lit-ry, 1960. 214 p. Translated from the Czech.

(MIRA 15:7)

(Microwaves) (Electric networks) (Microwave wiring)

114 - 1 - 2/15

AUTHOR: Khrabov, V. A., Engineer

TITLE: Testing a New Turbine at the Leningrad Metal Works.  
(Ispytaniya novoy turbiny na AMB)

PERIODICAL: ENERGOMASHINOSTROYENIYE, 1957, No. 1, p. 7, (U.S.S.R.)

ABSTRACT: A BMT-50-2 turbine was tested at the Leningrad Metal Works. It is a condensing turbine with steam tappings for heat supply; it is designed to supply heat to industrial centers at distances up to 50 km from the power station. It is a two-cylinder turbine with steam distribution valves in the low pressure cylinder instead of a rotating diaphragm on the steam tapping. This turbine was completed in twelve months, including design work and preparation for manufacture.

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

KHRABROV, I.; BOGDANOV, G.

Imperfections of the stern tube arrangement on the motorship  
"Murmanskets." Mor.flot 23 no.2:33 F '63. (MIRA 16:2)

1. Starshiy gruppovoy inzh.-mekhanik Murmanskogo portovogo flota  
(for Khrabrov). 2. Starshiy inzh. otdela tekhnicheskogo  
kontrolya Murmanskogo portovogo flota (for Khrabrov).  
(Motorships--Design and construction)

KHRABROV, N. I.

"Analysis of the Influence of Basic Parameters of Drilling Operations on the Rate of Gallery Driving." Sub 19 Apr 51, Moscow Mining Inst imeni I. V. Stalin

Dissertations presented for science and engineering degrees in Moscow during 1951.

SC: Sum. No. 480, 9 May 55

ANDROS, I.P., inzh.; ASSONOV, V.A., kand. tekhn. nauk.; BERNSHTEYN, S.A., inzh.; BOKIY, B.V., prof.; BROVMAN, Ya.V., inzh. BONDARENKO, A.P., inzh.; BUCHNEV, V.K., kand. tekhn. nauk; VERESKUNOV, G.P., kand. tekhn. nauk; VOLKOV, A.F., inzh.; GELESKUL, M.N., kand. tekhn. nauk; GORODNICHEN, V.M., inzh.; DIMENT'YEV, A.Ya., inzh.; DOKUCHAYEV, M.M., inzh.; DUBNOV, L.V., kand. tekhn. nauk; YEPIFANTSEV, Yu.K., kand. tekhn. nauk.; YERASHKO, I.S., inzh.; ZHEDANOV, S.A., kand. tekhn. nauk; ZIL'BERBROD, A.F., inzh.; ZINCHENKO, E.M., inzh.; ZORI, A.S., inzh.; KAPLAN, L.B., inzh.; KATSAUROV, I.N., dots.; KITAYSKIY, B.Y., inzh.; KRAVTSOV, Ye.P., inzh.; KRIVOROG, S.A., inzh.; KRINITSKIY, L.M., kand. tekhn. nauk; LITVIN, A.Z., inzh.; MALEVICH, N.A., kand. tekhn. nauk; MAR'KOVSKIY, G.I., doktor tekhn. nauk; MATKOVSKIY, A.L., inzh.; MINDELI, B.O., kand. tekhn. nauk; NAZAROV, P.P., kand. tekhn. nauk; NASONOV, I.D., kand. tekhn. nauk; NEYYENBURG, V.Ye., kand. tekhn. nauk; POKROVSKIY, G.I., prof., doktor tekhn. nauk; PROYAVKIN, E.T., kand. tekhn. nauk; ROZENBAUM, inzh.; ROSSI, B.D., kand. tekhn. nauk; SEMOVSKIY, V.N., doktor tekhn. nauk; SKIRGELLO, O.B., inzh.; SUKHUT, A.A., inzh.; SUKHANOV, A.F., prof., doktor tekhn. nauk; TARANOV, P.Ya., kand. tekhn. nauk; TOKAROVSKIY, D.I., inzh.; THUPAK, N.G., prof., doktor tekhn. nauk; FEDOROV, S.A., prof., doktor tekhn. nauk; MEDYUKIN, V.A., inzh.; KHOKHLOVKIN, D.M., inzh.; KHABROV, N.I., kand. tekhn. nauk; CHEKAREV, V.A., inzh.; CHERNAVSKIN, N.N., inzh.; SHREYBUR, B.P., kand. tekhn. nauk; EPOV, B.A., kand. tekhn. nauk; YAKUSHIN, N.P., kand. tekhn. nauk; YANCHUR, A.M., inzh.; YAKHONTOV, A.D., inzh.; POKROVSKIY, N.M., otvetstvennyy red.; KAPLUN, Ya.G. [deceased], red.; MONIN, G.I., red.; SAVITSKIY, V.T.,

(Continued on next card)

ANDROS, I.P.---(continued) Card 2.

red.; SANOVICH, P.O., red.; YOLOVICH, M.Z., inzh., red.; GORITSKIY, A.V., inzh., red.; POLUYANOV, V.A., inzh., red.; FADEYEV, E.I., inzh., red.; CHENCHKOV, L.V., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.; NADENINSKAYA, A.A., tekhn. red.

[Mining; an encyclopaedic handbook] Gornoe delo; entsiklopedicheskii spravochnik, Glav. red. A.M. Terpigorev. Moskva, Gos. nauchno-tekhnicheskoe izd-vo lit-ry po ugol'noi promyshl. Vol. 4 [Mining and timbering] Provedenie i kreplenie gornykh vyrabotok. Red-kollegija toma: N.M. Pekrovskii... 1958. 464 p. (MIRA 11:7)

(Mine timbering) (Mining engineering)

NESTERENKO, V.A.; KHRABROV, N.I.; PAVLENKO, I.Ya.; KONONENKO, V.M.

Driving and supporting haulage workings in mines developing the Fominskoye layer. Ugol' Ukr. 7 no.6:16-18 Je '63. (MIRA 16:8)

1. Khar'kovskiy institut gornogo mashinostroyeniya, avtomatiki i vychislitel'noy tekhniki (for Nesterenko, Khrabrov). 2. Shakterskiy trest ugol'nykh predpriyatiy kombinata Rostovugol' Ministerstva ugol'-noy promyshlennosti SSSR (for Pavlenko). 3. TsNIIgoroshheniye (for Kononenko).

MELEZHEV, S.A.; SMIRNOV, I.K.; IL'INSKIY, I.A.; KHRABROV, O.P.

Polyethylene vascular cannulas and their preparation. *Fiziol.*  
zhur. 50 no.5:643-644 My '64. (MIRA 18:2)

1. Laboratoriya patologicheskoy fiziologii Instituta skoroy  
pomoshchi imeni Dzhanelidze, Leningrad.

NEKHAMKIN, N.O., kand. tekhn. nauk; RYNDIN, N.I., kand. tekhn. nauk;  
KHRABROV, S.I., inzh.

Studying the joining of particle board by metallic fastening  
and tenons. Der. prom. 13 no.9:16 S '64.

(MIRA 17:11)

PETROV, D. P., FILIPPOV, N. V., FILIPPOVA, T. I., KHRABROV, V. A.

"Powerful Gas Discharge in Chambers with Conducting Walls." (Work carried out in 1954 and 1957); pp. 170-181.

"The Physics of Plasmas; Problems of Controlled Thermonuclear Reactions." Vol. IV. 1958, published by Inst. Atomic Energy, Acad. Sci. USSR. resp. ed. M. A. Leontovich, editorial work V. I. Kogan.

Available in Library.

*KV13-7370V, Vif*  
ANDRIANOV, A. M., BAZILEVSKAYA, O. A., BRAGINSKIY, S. I., BREZHNEV, B. G., PODGORNY,  
I. M., PROKHOROV, Y. G., FILIPPOV, N. V., FILIPPOVA, T. I. and KHRAZOV, V. A.

"Experimental Investigation of High Current Pulse Discharges."

paper to be ~~xx~~ presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic  
Energy, Geneva, 1 - 13 Sept 58.

242/20  
AUTHORS: Granovskiy, V.L., Lukyanov, S.F., Spivak, G.V. and Sirotenko, I.G.  
TITLE: Report on the Second All-Union Conference on Gas Electronics

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol. 4, No. 4,  
pp. 1359 - 1358 (USSR)

- I.M. Podkoreny and N.G. Koval'chiky - "New Data on X-ray Radiation during Pulse Discharges".  
 V.A. Durakov and M.P. Sulkowsky dealt with the investigation of the neutron radiation in powerful gas discharges in chambers with conducting walls.  
 N.A. Bakhmut et al. - "Investigation of the Gas Discharge in a Chemical Chamber".  
 S.M. Ogorod et al. - "A Turn of Plasma in Transverse Magnetic Field".  
 T.G. Leeser - "Data on the Division of a Cathode Spot on Mercury in a Low-pressure Arc" (see p 1209 or the Journal).  
 A.S. Johnson (England) - "A New Theory of the Cathode Spots (see p 1395 of the journal).  
 L.M. Bokudayev - "Positive Column in a Hydrogen Discharge With Stationary and Pulse Modes".  
 I.D. Makrashvich and A.A. Lind - "Current Distribution on the Surface of Electrodes in Electric Pulse Discharges".  
 E.S. Ryv - "Some Properties of Gas Discharges in Low-Voltage Candles".  
 G.Y. Gofstora and V.L. Graniniky - "Comparison of the Faraday Demionization in the Isotopes of Hydrogen (H and D).  
 I.A. Abolinska communicated some results on the pre-breakdown current pulse at low pressures.  
 M.V. Veltilevskaya and A.I. Zaryay - "Charge-density Oscillation Waves in Cylindrical Plasma".  
 I. Palkov of Czechoslovakia communicated some information on the wave-like phenomena in gas-discharge plasmas.  
 B. Kaczmarek dealt with the problem of the determination of the energy of fast ions in pulse discharges.  
 B.B. Matossik - "Conversion and Maintenance of High-frequency Discharges".  
 S.I. Bratkovskiy and V.D. Suttorov - "Theory of a High-temperature Plasma Strip".  
 The fifth section was presided over by N.A. Kaptev and dealt with high-frequency currents in gases. The following papers were read:  
 V.Ye. Solntsev - "Formation of Ultra-high Frequency Pulse Discharges in Inert Gases".  
 G.I. Paleyuk - "Influence of the Boundary Conditions on the Formation and Maintenance of High-frequency Discharges".  
 P.I. Bulkin et al. - "Investigation of a Self-maintained Ultra-high Frequency Pulse Discharge and the Process of its Development".  
 G.M. Zastavko and G.S. Salnikov - "Some Results of the Investigation of the Formation of Low-pressure High-frequency Discharges".  
 G.I. Marusin (USSR) - "Conductivity of Weakly Ionised Plasmas".  
 A.A. Kostyukov - "The Conditions of Transition from High-frequency Corona Discharge at Atmospheric Pressure".  
 V.N. Solntsev - "The Relationship Between the Characteristics of the Ultra-high Frequency Current and the Direct Current in Gas Discharges".  
 B.B. Matossik analysed the conductivity of the direct-current plasma in the window of a resonance discharge tube.  
 G.M. Lettik and L.P. Sheaburin dealt with the applicability of the probe method to high-frequency discharges (see p 1358 of the journal).  
 The paper by V. Ye. Mitauk et al. was devoted to the investigation of the ultra-high frequency plasma by means of the Stark effect.  
 G.S. Solntsev et al. dealt with the problem of electric fields in a high-frequency discharge at low pressures.  
 Ya. Bakhmut of Rumania read a paper entitled "High-frequency Discharges in Methane".  
 The work of the sixth section was devoted to the problem of plasma and its radiation; the section was presided over by V.A. Fabrikant. The following papers were read:  
 Yu.M. Kafan - "Neyshabur Probe Methods of Plasma Investigation".  
 V.I. Drosdov - "Oscillometric Measurements in Plasma".  
 V.A. Simodov and A.G. Nileskin - "Investigation of the Movement of Plasma by Means of a Mass Spectrometer of the Penning Type".

KIRABROV, V. A.

Vol. 1, (Parte 1a), p. 1-12. Altimann, Amedio; V.T. Pernier, Academias; and  
Edm. Viana, Instituto of Physical and Mathematical Sciences. Ms. of this  
volume, fols. 1-2. Another ms. by R.J. Savery, Consideration of Physical and Mathematical  
Sciences. (Buenos Aires) G.I.C. Analysis. Sub. Ms. Mat. Brasil.  
This collection of articles is intended for scientific research workers  
and other persons interested in nuclear physics. The volume contains 14 papers  
presented by invited speakers at the Second Conference on Theoretical Nuclear  
Physics, held in Buenos Aires on September 1950.

In the detailed data, two parts, Part I contains 27 papers dealing with problems on centralized thermoelectric powerplants, and Part II contains 26 papers on decentralized powerplants, including problems of production and distribution of electricity from small powerplants and of decentralized powerplants. The third paper by Dr. A. S. Gerasimov presents a review of problems on centralized thermoelectric powerplants. The remaining papers in the detailed data are distributed among the following subjects:

(1) Problems on centralized thermoelectric powerplants in molecular industries, industrial enterprises and in the energy sector of agriculture, mining and construction, and in the design of agricultural powerplants, electrical and magnetic, electrical, thermal, hydroelectric, wind, solar, nuclear, thermal, nuclear, magnetohydrodynamic, and other powerplants.

(2) Problems on decentralized powerplants, including problems of decentralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(3) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(4) Problems on decentralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(5) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(6) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(7) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(8) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(9) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(10) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(11) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(12) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(13) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(14) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(15) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(16) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(17) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(18) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(19) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(20) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(21) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(22) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(23) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(24) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(25) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(26) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

(27) Problems on centralized powerplants in residential buildings, residential areas, districts, towns, cities, and rural areas, as well as in the countryside.

2007/2008

卷之三

**APPROVED FOR RELEASE: 09/17/2001**

**CIA-RDP86-00513R000722320001-4"**

21(9)

SOV/89-6-3-8/29

AUTHORS: Budyanskiy, G. M., Zavenyagin, Yu. A., Fedorov, N. D.,  
Khrabrov, V. A.

TITLE: On the Possibility of Accelerating Polarized Protons in a  
Cyclotron (O vozmozhnosti uskoreniya polyarizovannykh protonov  
v tsiklotrone)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 3, pp 306 - 310 (USSR)

ABSTRACT: In connection with the construction of an ion source for polarized ions (Ref 1) the problem arises whether it is possible to accelerate these polarized ions in a cyclotron and to let them escape from it. If an acceleration would be feasible, a primary straying could be eliminated and a particle beam with a sufficient high intensity could be produced provided that an sufficiently strong ion source has been chosen. The probability of spin orientation inversion during the acceleration of polarized protons in a cyclotron is estimated theoretically. The magnetic field of the cyclotron decreases with growing radius and besides exhibits an azimuthal inhomogeneity. The probability for the polarization of accelerated protons when the beam escapes from the cyclotron chamber is also estimated

Card 1/2

On the Possibility of Accelerating Polarized Protons  
in a Cyclotron

SOV/89-6-3-8/29

theoretically. In both cases it is shown that the probability of depolarization is very small. This work has already been carried out in 1956. There are 1 figure and 2 Soviet references.

SUBMITTED: September 20, 1958

Card 2/2

L 62915-65 EWT(m)/EWP(w)/ENA(d)/T/EWP(t)/EWP(z)/EWP(b) MJW/JD

ACCESSION NR: AR5019141

UR/0137/65/000/007/1029/1029

41

40

73

SOURCE: Ref. zh. Metallurgiya, Abs. 7I186

AUTHOR: Mishin, D. D.; Khrabrov, V. A.

TITLE: Study of the temperature stabilization of the magnetic permeability of 79NM permalloy

CITED SOURCE: Sb. Fiz. magnitn. yavleniy. Sverdlovsk, 1964, 109-111

TOPIC TAGS: permalloy, magnetic permeability, temperature control, electric resistance, metal aging/79NM permalloy

TRANSLATION: A study was made of the effect of aging on the electrical resistance  $R_T$  and the diffusional magnetic permeability  $\mu_{dif}$  of toroidal samples made from strips of 79NM permalloy with a thickness of 0.008cm. The samples were subjected to different heat treatments: heating for 3 min to 800C, to 1000C and to 1100C, and heating for 120 min to 1100C. The holding time during aging was 60 min, and cooling was done at a rate of 200 degrees/hour.  $R_T$  was measur-

Card 1/2

L 62915-65

ACCESSION NR: AR5019141

ed at 445C, and  $\mu_{\text{dif}}$  in the temperature region from 100-300C in an argon atmosphere. It was established that  $\Delta R/R_T$  increases as a function of the holding time during aging. It was shown that the highest temperatures for the stabilization of  $\mu_{\text{dif}}$  is exhibited by the sample heated for 3 min to 800C, for which  $\Delta R/R_T$  has the largest value. It was established that there exists a determined relationship between the course of  $R_T$  during the aging process and the temperature stabilization  $\mu_{\text{dif}}$  of a permalloy. (From RZh Fiz.)

SUB CODE: MM

ENCL: 00

dm  
Card 2/2

L 24175-66 EWP(e)/EWT(m)/EWA(d)/EWP(t) IJP(c) JD

ACC NR: AR6005234

SOURCE CODE: UR/0058/65/000/009/E131/E131

AUTHORS: Mishin, D. D.; Khrabrov, V. A.

TITLE: Investigation of the temperature stabilization of the magnetic permeability of 79 NM permalloy 20 13

SOURCE: Ref. zh. Fizika, Abs. 9E1085

REF. SOURCE: Sb. Fiz. magnitn. yavleniy. Sverdlovsk, 1964, 109-111

TOPIC TAGS: magnetic permeability, permalloy, magnetic domain boundary, thermal stability, resistivity, electron mobility, heat treatment/79 NM permalloy

TRANSLATION: The authors investigated the influence of aging on the electric resistivity  $R_T$  and the differential magnetic permeability  $M_{dif}$  of toroidal samples prepared from a tape of permalloy 0.008 cm thick. The samples were subjected to different heat treatment (HT): heating for three minutes to 800 (1), to 1000 (2), and to 1100C (3) and heating for 120 minutes to 1100C (4). The aging consisted of

Card 1/2

L 24175-66

ACC NR: AR6005234

soaking for 60 minutes, and the cooling was at a rate of 200C/hr. The value of  $R_T$  was measured at 4450, and  $M_{dif}$  in the region  $T = 100$  -- 300C in an atmosphere of argon. It was established that  $\Delta R/R_T$  increases with the soaking time during aging. From a comparison of the curves of the dependence  $M_{dif}^{T_0} C/M_{dif}^{200} C$ . It is seen that the greatest temperature stability of magnetic permeability is possessed by sample 1, for which  $\Delta R/R_T$  has the largest value. The presence of a definite regular connection between the variation of  $R_T$  during the aging process and the temperature stability of the permeability of permalloy is established. This connection is attributed to the existence of a connection between the shift of the domain boundaries and the mobility of the conduction electrons following a change in the permalloy temperature. N. Smol'kov.

SUB CODE: 20

Card

2/2 ✓

AID P - 3839

Subject : USSR/Meteorology  
Card 1/1 Pub. 71-a - 2/35  
Author : Khrabrov, Yu. B.  
Title : On short-range forecasting using synoptic methods  
Periodical : Met. i. gidr., 6, 7-12; N/D 1955  
Abstract : A detailed analysis of the methods and components of a three-day forecast. Research was done on cyclones, anticyclones and heat waves and their average time and intensity. The possibility of 5 to 7 day forecasting is assumed. One diagram, 2 tables. Nine Russian references, 1933-1954.  
Institution : None  
Submitted : No date

KHRABROV, Yu.B.

Compiling monthly weather forecasts with reduced forewarning period. Meteor.i gidrol. no.10:30-33 0 '56. (MLRA 9:12)

(Weather forecasting)

Родионов, Н.Н.  
Смирнов, Ю.А.

Twenty years of weather forecasting in the Central Institute of  
Prognoses. Trudy TSIP no.55:23-24 '57. (MLRA 10:9)  
(Weather forecasting)

KHRABROV, Yu.B.

Some problems in estimating solar activity for the preparation  
of monthly weather forecasts. Trudy TSIP no.71:11-16 '58.  
(MIRA 11:12)  
(Weather forecasting)

KHRABROV, Yuriy Borisovich; KATS, A.L., otv.red.; BLINNIKOV, L.V.,  
red.; ZARKH, I.M., tekhn.red.

[Methods for compiling weather forecasts for three to seven  
days] Metodika sestavleniya prognozov pogody na 3 - 7 dnei.  
Moskva, Gidrometeor. izd-vo, 1959. 181 p. (NIRA 12:7)  
(Weather forecasting)

3(7)

AUTHOR:

Girs, A. A.

SOV/50-59-8-17/19

TITLE:

Yu. B. Khrabrov "Method of Compiling Weather Forecasts for 3-7 Days". Gidrometeoizdat Publishing House, Leningrad, 1959  
(Yu. B. Khrabrov "Metodika sostavleniya prognozov pogody na 3-7 dney". Gidrometeoizdat. L. 1959)

PERIODICAL:

Meteorologiya i hidrologiya, 1959, Nr 8, pp 47-50 (USSR)

ABSTRACT:

Although the School of B. P. Mul'tanovskiy has worked 40 years on the problem of long-term forecasts given at short notice, the quality of the forecasts based on the school's methods, does not meet established practical standards. The latest investigations for improving these methods were carried out at the Tsentral'nyy institut prognozov (Central Institute of Forecasts) and in various organizations of the GUGMS. A highly active part was played by Yu. B. Khrabrov who found a number of rules in the development of macroprocesses in 1956-57. This enabled him to work out a new, better, and physically better founded, method of weather forecasts for 3-7 days. It is put forward in the book discussed here. Khrabrov's method is based on the investigation of the character of processes which

Card 1/2

SOV/50-59-8-17/19

Yu. B. Khrabrov "Method of Compiling Weather Forecasts for 3-7 Days".  
Gidrometeoizdat Publishing House, Leningrad, 1959

are observed during the synoptic periods of Mul'tanovskiy. But in the definition of this term, the author starts from considering the state and the evolution of the planetary altitude frontal zone. The author's principal attention is directed to the evolution of the processes within the synoptic processes; he uses the conclusions of the vortex theory. The author shows that during a synoptic period a homogeneous macroprocess is not always observed. The latter often ends before the synoptic period. Khrabrov introduces the term of a homogeneous macrosynoptic process within which the planetary altitude frontal zone undergoes a certain evolution. A short table of contents of individual chapters, and some small shortcomings, are indicated. Paragraph 4 of the 2nd chapter describes the characteristics of the development of processes of synoptic periods in East Siberia and the Soviet Far East, which were obtained in the papers by L. F. Noshchenko, A. M. Glybovets, and L. I. Kuzmishcheva on the basis of Khrabrov's method.

Card 2/2

GIRS, Aleksandr Aleksandrovich. Prinimali uchastiye: GUROV, V.P.,  
dotsent; KHRABROV, Yu.B., kand.fiziko-matem.nauk. POKROVSKAYA,  
T.V., otv.red.; VLASOVA, Yu.V., red.; BRAYNINA, M.I., tekhn.red.

[Fundamentals of long-range weather forecasting] Osnovy dolgo-  
strochnykh prognozov pogody. Leningrad, Gidrometeor.izd-vo, 1960.  
559 p. (MIRA 13:7)

1. Tsentral'nyy institut prognozov (for Khrabrov).  
(Weather forecasting)

KHREBROV, Yu.B.

Concerning V.P.Sadokov's article "Fundamental errors in the theoretical principles underlying long-range weather forecasts given a short period in advance." Izv. AN SSSR. Ser. geofiz. no.8:1285-1286 Ag '60.

(MIRA 13:8)

(Weather forecasting)

(Sadokov, V.P.)

KHRABROV, Yu.B.

Making extended weather forecasts on the basis of a complex of prognostic relationships. Trudy TSIP no.89:122-126 '60.  
(MIRA 14:3)  
(Weather forecasting)

KHRABROV, Yu.B.

Accounting for long range meteorological processes in preparing  
monthly weather forecasts. Astron.sbor no.3/4:114-120 '60.  
(MIRA 14:11)

1. TSentral'nyy institut prognozov.  
(Weather forecasting)

KHRABROV, Yu.B.

Formation of mean monthly air temperatures and their prediction.  
Trudy TSIP no. 92:3-12 '60. (MIRA 14:2)  
(Atmospheric temperature) (Weather forecasting)

KIRABROV, YURIY BORISOVICH

A method of preparing weather forecasts for 3-7 days. Jerusalem, Published for the National Science Foundation, Washington, D.C., and the Dept., of Commerce, USA, by the Isreal Program for Scientific Translations, 1961.

202 p. graphs, maps, tables.

Translated from the original Russian: Metodika sostavleniya prognozov pogody na 3-7 dney, Moscow, 1959.

At head of title: Russia. Glavnoye Upravleniye Gidrometeorologicheskoy Sluzhby. Tsentral'nyy Institut Prognozov.

Bibliography: p. 132-141.

KHRABROV, Yu.B., doktor geograf.nauk

Year of contrasts in climate. Priroda 50 no.5:79-82 My '61.  
(MIRA 14:5)

1. Tsentral'nyy institut prognozov.  
(Weather)

POGOSYAN, Kh.P., nauchnyy red.; KATS, A.L., nauchnyy red.; KHRABROV,  
Yu.B., nauchnyy red.; USMANOV, R.F., nauchnyy red.;  
ELINNIKOV, L.V., red.; ZARKH, I.M., tekhn. red.

[Transactions of the First Conference on General Atmospheric  
Circulation, March 14-18, 1960] Trudy Nauchnoi konferentsii  
po voprosam obshchei tsirkulyatsii atmosfery. 1st, Moscow.  
Moskva, Gidrometeoizdat (otdelenie) 1962. 231 p.

(MIRA 16:4)

1. Nauchnaya konferentsiya po voprosam obshchey tsirkulyatsii  
atmosfery. 1st, Moscow, 1960. 2. TSentral'nyy institut progno-  
zov, Moskva (for Pogosyan, Kats, Usmanov).  
(Atmosphere)

KATS, A. L.; KHRABROV, Yu. B.; FEDULOVA, M. N.; YAKUSHEVA, O. M.

Use of empirical influence functions to forecast mean values  
of  $H_{500}$ , at the present time and the tendency for the subsequent  
synoptic period. Trudy TSIP no.119:24-35 '62.

(MIRA 16:1)

(Atmospheric pressure)

S/050/63/000/003/003/003  
D207/D308

AUTHOR: Khrabrov, Yu.B.

TITLE: Prospects for the development of a synoptic method  
of long-term weather forecasting

PERIODICAL: Meteorologiya i gidrologiya, no. 3, 1963, 47-51

TEXT: The past history and recent achievements in long-term forecasting are reviewed / Abstracter's note: No references given / and it is concluded that the most pressing need is for more observational information and its rapid publication, publication of past records, international exchange of information and use of mechanical methods, e.g. punched cards. The following lines of future research on the causes of air motion are suggested: (1) Macrosynoptic transformations in relation to the stratified nature of temperature fields in the stratosphere and troposphere. (2) Development of macroprocesses and weather at temperate latitudes in relation to the temperature fields in the atmosphere at fixed and seasonal atmospheric activity centers. (3) Vertical structure and air

Card 1/2

Prospects for the development ...

S/050/63/000/003/003  
D207/D308

exchange between the northern and southern hemisphere. (4) Distribution of air masses at fixed levels in free atmosphere during the months with a total excess or deficiency of air in the northern hemisphere. (5) Satellite observations of high and low temperature zones and of humidity in relation to the development of macrosynoptic processes in the atmosphere.

ASSOCIATION: Tsentral'nyy institut prognozov (Central Forecasting Institute)

Card 2/2

KHRABROV, Yu.B., KOZEL'TSEVA, V.F.

Results of the operational investigation of various methods for  
monthly weather forecasting. Trudy TSIP No.124:3-13 '63.

(MIRA 16:8)

(Weather forecasting)

KHRABROV, Yu.B., doktor geograf. nauk, prof.; RESHETOV, V.D., kand.  
fiz.-matem. nauk

Complex method and the problem of long-range weather fore-  
casting. Meteor. i gidrol. no.5:51-54 My '64.

(MIRA 17:6)

1. TSentral'nyy institut prognozov i TSentral'naya aerolo-  
gicheskaya observatoriya.

KHRABROV, Yu.B., prof.

Monthly weather forecasts. Meteor. i gidrol. no.7:63-64  
Jl '64  
(MIRA 17:8)

1. Nachal'nik otdela dolgosrochnykh prognozov TSentral'nogo  
instituta prognozov.

ACC NR: AT7005072

SOURCE CODE: UR/2546/66/000/154/0041/0046

AUTHORS: Khrabrov, Yu. D.; Zinov'yeva, L. M.

ORG: none

TITLE: Calculated prognosis of the  $H_{500}$  field for the subsequent synoptic period and the possibility for increasing its accuracy

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 154, 1966. Vzaimodeystviye protsessov v stratosfere i troposfere i dolgosrochnyye prognozy pogody (Interaction of processes in the stratosphere and troposphere and long-range weather forecasting), 41-46

TOPIC TAGS: atmospheric model, synoptic meteorology, atmospheric interaction, <sup>computer</sup> calculation

ABSTRACT: A new method for calculation of  $H_{500}$  prognosis for the following synoptic period is being worked out in view of the unsatisfactory results obtained by applying the method of A. L. Kats, Yu. B. Khrabov, M. N. Fedulova, and O. M. Yakusheva (Prognoz perioda s pomoshch'yu empiricheskikh funktsiy vliyaniya. Trudy TsIP, vyp. 119, 1962) involving the current configurations. The working formula developed is represented by the equation

$$(H)'_n = \sum_{i=1}^{10} A_{ni}(T_{ni})'_i + \sum_{i=1}^{10} B_{ni}(\Delta T)_i + \sum_{i=1}^4 C_{ni} I'_i + \sum_{i=1}^4 D_{ni} J'_i,$$

Card 1/2

ACC NR: AT7005072

where  $k$  - point for which  $H'$  is calculated;  $i$  - 10 points for which forecasters  $T_{500}$  and  $\Delta T$  are considered;  $(T_{500})^i - T_{500}$  deviation of the synoptic period tendencies from the average value for the given circulation type;  $\Delta T - T_{500}$  difference between the first and second day of the synoptic period tendency;  $(H)_k'$  - prognosis of the deviation from the norm of  $H_{500}$  in the future synoptic period. As a norm, one assumes the average value of  $H_{500}$  for a given type for many years;  $I_z$  - zonal circulation indices in 3 sectors of the northern hemisphere;  $I_M$  - meridional indices in the same sectors;  $A_{ki}$ ,  $B_{ki}$ ,  $C_k$ ,  $D_k$  - weight coefficients (empirical effect functions). The calculations, performed by electronic computers, were repeated twice at 20 European and Asiatic stations. The accuracy of the obtained prognostic values was considerably improved when the strictly terrestrial factors (temperature, wind, moisture distribution, etc) were qualitatively corrected by also introducing the effect of the bombardment of the earth's atmosphere by solar currents. This was particularly noticeable and important during the period of the passage of sunspots through the central meridian of the sun. Orig. art. has: 1 figure, 4 tables, and 2 equations.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 005

Card 2/2

KAGANOVICH, Yu.Ya.; ZLOBINSKIY, A.G.; KHRABROVA, N.I.; DOLBNIN, A.V.;  
IVANOV, A.A.; MATUSYAK, B.I.; MASSOV, Ya.A.; TARANOV, Ye.S.

Drying of yeast feeds in the fluidized bed. Gidroliz. i  
lesokhim. prom. 16 no.6:3-4 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut galurgii (for  
Kaganovich, Zlobinskiy, Khrabrova). 2. Gosudarstvennyy  
institut po proyektirovaniyu gidroliznykh zavodov (for  
Dolbnin, Ivanov, Matusyak, Massov, Taranov).

KHRABROVA, O.P.

Features of the reaction of the animal to shock-producing stimulations  
during the administration of aminazine. Biul. eksp. biol. i med.  
no.2:23-27 F '61. (MIRA 14:5)

1. Iz laboratorii patofiziologii Nauchno-issledovatel'skogo instituta  
skoroy pomoshchi imeni I.I.Dzhanelidze (dir. - dotsent S.N.Polikarpov),  
Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR S.V,  
Anichkovym.

(CHLORPROMAZINE) (SHOCK)

SELEZNEV, S.A.; IL'INSKIY, I.A.; KHRABROVA, O.P.

Hematological patterns in laboratory animals (cats and rabbits) and  
principles of their formation. Fiziol.zhur. 47 no.5:650-654 My '61.  
(MIRA 14:5)

1. From the Laboratory of Pathological Physiology, J.J.Djenalidze  
Research Institute of First Aid, Leningrad.  
(BLOOD) (VETERINARY PHYSIOLOGY)

KHRABROVA, O.P.

Experimental data on the compound use of neuroplogic, vasopressor and hormonal substances in the treatment of shock. Biul. eksp. biol. i med. 3[1.e.53] no.3:60-64 Mr '62. (MIRA 15:4)

1. Iz laboratorii patologicheskoy fiziologii (rukovoditel' - kand. med.nauk S.A.Seleznev) Nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni prof. I.I.Dzhanelidze (dir. - dotsent S.N.Polikarpov, nauchnyy rukovoditel' - zasluzhennyy deyatel' nauki prof. M.S.Lisitsyn), Leningrad. Predstavlena deystviteľnym chlenom AMN SSSR S.V.Anichkovym.  
(SHOCK) (AUTONOMIC DRUGS) (HORMONE THERAPY)  
(VASOMOTOR DRUGS)

KHRABROVA, O.P. (Leningrad)

Use of ACTH and cortisone in experimental shock. Prohl.endok.  
i gorm. no.4:16-18 '62. (MIRA 15:11)

1. Iz laboratorii patofiziologii Nauchno-issledovatel'skogo  
instituta skoroy pomoshchi imeni I.I. Dananelidze (dir. -  
dotsent S.N. Polikarpov).

(SHOCK) (ACTH) (CORTISONE)

SELEZNEV, S.A., KHRABROVA, O.P.

Methodology of chronic catheterization of the portal vein in  
cats. Biul.eksp.biol. i med. 55 no.1:122-123 Ja'63.  
(MIRA 16:7)

1. Iz laboratorii patologicheskoy fiziologii (rukovoditel' -  
kand.med. nauk S.A.Seleznev) Nauchno-issledovatel'skogo in-  
stituta skoroy pomoshchi imeni I.I.Dzhanelidze (dir. - doktor  
meditsinskikh nauk Ye.G.TSurinova) Leningrad. Predstavlena  
akademikom V.N.Chernigovskim.

(PORTAL VEIN—EXAMINATION) (CATHETERS)

ROZHDESTVENSKIJ, V.; PAVLOV, N., master sports; KHREBRYKH, Svetlana,  
sportswoman I razryada

A student amateur club. Kryl.rod. 13 no.6:9-10 Je '62.  
(MIRA 19:1)

1. Predsedatel' planernoy sektsii studencheskogo samodeyatel'-  
nogo kluba Kuybyshevskogo aviationsionnogo instituta (for  
Rozhdestvenskiy). 2. Rukovoditel' aviamodel'noy laboratori  
studencheskogo samodeyatele'nogo kluba Kuybyshevskogo aviationsionnogo  
instituta (for Pavlov).

KHRABUSTOVSKIY, I. F.

"Data on the Study of the Antibiotic Properties of 'Mikrotsidivaktsin'  
(Microcide-Vaccine) Against Paratyphus in Calves." Cand Biol Sci,  
Ukrainian Inst of Experimental Veterinary Medicine, 1953. (RZhBiol,  
No 1, Sep 54)

SO: Sum 432, 29 Mar 55

USSR/Farm Animals - Large Horned Cattle.

Q-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83367

Author : Khrabustovskiy, I.F.

Inst : Khar'kov Zootechnical Institute.

Title : Effects of Zoologically Hygienic Cow Keeping Procedures  
upon the Animals' Organic Condition.

Orig Pub : Sb. tr. Khar'kovsk. zootekhn. in-ta, 1957, 9, 139-150

Abstract : Investigations were carried out in rayons of UkrSSR forest steppes which aimed at determining reactions of the cow organism to keeping conditions in cow-sheds. As long lasting temperature and humidity measurements of the air were performed, the cow-sheds' microclimate was investigated with self-registering apparatuses, and when such measurements were taken just once, simple apparatuses were used. In January to April of 1954, temperatures in the cow-shed

Card 1/2

KHRABUSTOVSKIY, Ivan Frantsevich

[Livestock barns and the hygiene of housing stock] Tvarynnystki  
prymishchennia ta higiena utrymannia khudoby, Kharkiv, Kharkivske  
knyzhkove vyd-vo, 1959. 80 p. (MIRA 13:10)  
(Stables)

KHRABUSTOVSKIY, Ivan Frantsovich

[Care and maintenance of farm animals] Dohliad ta utrymannia  
sil's'kohospodars'kikh tvaryn. Kyiv, Derzh. vyd-vo sil's'ko-  
hospodars'koi lit-ry, 1959. 106 p. (MIRA 15:3)  
(Domestic animals)

GORB, T.V. [Horb, T.V.], doktor sel'skokhoz.nauk; TERESHCHENKO, F.K., kand.biolog.nauk; BOGAYEVSKIY, O.T. [Bohaievs'kyi, O.T.], kand.veterin.nauk; POTEMKIN, M.D., [Pot'omkin, M.D.], akademik; KNIGA, M.I. [Knyha, M.I.]; POPOV, O.Ya., kand.sel'skokhoz.nauk; KHMMELIK, G.G. [Hmelyk, H.H.], kand.sel'skokhoz.nauk; SHRAM, I.P., kand.sel'skokhoz.nauk [deceased]; KOPIL, A.M., kand.sel'skokhoz.nauk; TSMLYUTIN, V.K., kand.sel'skokhoz.nauk; BOZHKO, P.Yu., doktor sel'skokhoz.nauk; KROMIN, S.S., kand.sel'skokhoz.nauk; ZBMLYANSKIY, V.M. [Zemlians'kyi, V.M.], kand.sel'skokhoz.nauk; BORISENKO, A.M. [Borysenko, A.M.], kand.biolog.nauk; ZAKHARENKO, V.B., kand.biolog.nauk; SMIRNOV, I.V. [Smyrnov, I.V.], kand.biolog.nauk; KHRABUSTOVSKIY, I.F. [Khrabustovs'kyi, I.F.], kand.biolog.nauk; TORSTYANETS'KAIA, M.N., [Trostianets'ka, M.N.], assistent; ALESHKO, P.I., inzh.; VASIL'YEV, Vasyl'iev, O.P., kand.tekhn.nauk; BUGAIENKO, I.I. [Buhaienko, I.I.], starshiy prepodavatel'; TRAKHTOMIROVA, O.O., kand.ekonom.nauk; BUTKO, S.D., kand.ekonom.nauk; TLESHEK, K.G. [Teleshyk, K.H.], doktor ekonom.nauk; YIROSHENKO, V.D., kand.ekonom.nauk; LISIY, I.Y. [Lysyi, I.I.], red.; YIROSHENKO, T.G. [Iroshenko, T.H.], tekhn.red.

[Handbook for zootechnicians] Dovidnyk zootekhnika. 2., dopovnene i perereblene vyd. Kyiv, Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSR, 1960, 728 p.  
(MIRA 15:2)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Potemkin). 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Kniga).  
(Stock and stock breeding)

I uo312-01 an(1) IJP(c) AT/GD  
ACC NR: AT6020432

SOURCE CODE: UR/0000/65/000/000/0024/0035

AUTHOR: Kornilov, Ye. A.; Kovpik, O. F.; Faynberg, Ya. B.; Khrachenko, I. F.

ORG: none

72  
P+1TITLE: Investigation of particle energy and conditions of excitation of low frequency oscillations in a plasma formed by the growth of instabilities in a beam-plasma system

SOURCE: AN UkrSSR. Vzaimodeystviye puchkov zaryazhennykh chastits s plazmoy (Interaction of charged particle beams with plasma). Kiev, Naukova dumka, 1965, 24-35

TOPIC TAGS: ion current, ion density, plasma interaction, plasma beam interaction, acoustic frequency

ABSTRACT: The conditions necessary for the excitation of ion currents in experiments where electron beams traverse the plasma are reported. The experiment is described and a diagram of it is given. An electron beam of 2-5 kev electrons (10-80 mA) is incident on the plasma in the magnetic field (0-2 kg) parallel to the beam. Movable analyzers were used thus permitting the interaction length of beam and plasma to be changed. Analysis of the discharge showed that ion current density across the magnetic field lines is smaller than that along the field lines. These currents could be generated only when the ambient pressure was between  $4 \cdot 10^{-4}$  and  $10^{-2}$  mm Hg. The current maximum also appears at a pressure corresponding to maximum plasma oscillations. It is also shown

Card 1/2

L 06312-67

ACC NR: AT6020432

that the electron ion currents emerging from the plasma are equal to the current entering the plasma. The observation of outflowing currents has shown that for sufficiently long plasma-beam interaction length, the current from the end of the plasma consisted solely of ions. The investigation of the frequency distribution of the excited oscillations shows that the ion current arises in situations favoring the production of instabilities. The most favorable conditions for generating beams of ions with energies up to 1 kev are given. The study of excitation frequency change with electron temperature and type of gas used shows that the low frequency oscillations generated in the experiment were near the ion-acoustic frequencies. Further study of the generation of low frequencies is needed. Orig. art. has: 6 figures, 1 table.

SUB CODE: 20/ SUBM DATE: 11Nov65/ ORIG REF: 017/ OTH REF: 003

Card 2/2 *sd*

CHEBOTAREV, A.I., doktor tekhn. nauk; KHRACHENKO, S.I., kand. tekhn.  
nauk

Methods for the estimation of possible changes in the river  
runoff under the influence of agriculture. Meteor. i gidrol.  
no.7u27-32 Jl '64 (MIRA 17:8)

1. Gosudarstvennyy hidrologicheskiy institut.

PORADOVSKY, K.; KHRADECKY, L.; MACH, M.; KLICKOVA, I.; POKORNY, J.;  
PONTUCH, A.; ZAJACOVA, E.

Obstetrical surgery and perinatal mortality. Cesk. gynek.  
29 no.6:534-545 Ag '64.

1. Gyn.-por. klin. Lek. fak. University P.J. Safarika v  
Kosiciach (prednosta doc. dr. K. Poradovsky, CSc.) Gyn.-  
por. klin. Lek. fak. University Karlovy v Plzni (prednosta  
prof. dr. V. Mikolas); Gyn.-por. klin. Lek. fak. University  
J.E. Purkyne v Brne (prednosta prof. dr. L. Havlasek [deceased])  
a Gyn.-por. klin. Lek. fak. University Komenskeho v Bratislave  
(prednosta prof. dr. S. Stefanic).